

REMARKS**1. Status of the Claims and Claim Numbering**

In the Notice, the Examiner asserts that the status of claims as indicated in Applicant's previously reply of November 11, 2008 is incorrect. Specifically, the Examiner alleges that the status of claims 40-42 is incorrect because only claims 1-39 were present in the amendment filed on April 21, 2008 (the "April 2008 Reply"). As explained below, in view of the history of claim amendments for this application, Applicant submits that the claim numbering in the April 2008 Reply amendments was erroneous. New claims 38 and 39 of the April 2008 Reply should have been numbered 41 and 42. The Office Action mailed on May 29, 2008, however, entered the amendments requested in the April 2008 Reply and thus sustained Applicant's erroneous numbering recognizing the presence of claims 1-39. Based on a correct accounting for claim numbering, Applicant submits that claims 21, 23, 35, 36, 41, and 42 are pending in this application. Claims 21, 23, 35, and 41 are allowed.

Shown below is an account of the pending and canceled claims during the prosecution history of this application. Only claim amendments that were entered are indicated.

Date	Pending Claims	Canceled Claims
08/28/03 (original claims)	1-20	None
09/13/06	21	1-20
09/21/06	21-40	1-20
05/09/07	21, 23-25, 27, 28, 35, 36	1-20, 22, 26, 29-34, 37-40
10/01/07	21, 23-25, 27, 28, 35, 36	1-20, 22, 26, 29-34, 37-40
04/21/08	21, 23, 35, 36, 38, 39	1-20, 22, 24-34, 37

As shown in the table, new claims 22-40 were introduced by Applicant's amendment of September 21, 2006. *See* Appendix A. These amendments were entered and then recognized in the Office Action mailed on November 9, 2006, which indicates pending claims 21-40. *See* Appendix B. Claims 37-40 were subsequently canceled in Applicant's amendment of May 9, 2007. *See* Appendix C. This amendment was entered and then recognized in the Office Action mailed on May 30, 2007, which indicates pending claims only up to claim 36. *See* Appendix D. The same claims, 21, 23-25, 27, 28, 35 and 36 were pending after Applicant's amendment of October 1, 2007, as indicated by the Office Action mailed on November 20, 2007. *See* Appendix E.

In view of this history, claims 1-40 have been present in the application since entry of the September 21, 2006 amendment, and Applicant's addition of new claims 38 and 39 in the April 2008

Reply was erroneous. *See* Appendix F. Claims 38 and 39 should have been numbered 41 and 42. To correct this erroneous numbering, as explained in Applicant's most recent November 11, 2008 reply, Applicant indicated claims 37-40 as being canceled, and new claims 38 and 39 from the April 2008 Reply as being number 41 and 42. Applicant submits that the claim status indications in April 2008 Reply showing claim 40 as canceled, 41 as previously presented, and 42 as currently amended, are accurate. In view of the foregoing, Applicant respectfully requests that the Examiner withdraw the Notice and review the April 2008 Reply as filed.

2. Conclusion

Applicant respectfully submits that the instant application is in good and proper order for allowance and early notification to this effect is solicited. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the instant application, the Examiner is encouraged to call the undersigned at the number listed below.

Respectfully submitted,

POLSINELLI SHALTON FLANIGAN SUELTHAUS PC

Dated: February 9, 2009

On behalf of: Teddy C. Scott, Jr., Ph.D.
Registration No. 53,573

By: /Ron Galant, Ph.D./
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APPENDIX A

Application No.: 10/604,943

Docket No.: 050992.0300.CPU\$07

32. (new) The nucleic acid of claim 30, wherein the nucleic acid is capable of modulating expression of a target gene.

33. (new) The nucleic acid of claim 31, wherein the nucleic acid is at least 15/25 complementary to a binding site sequence of 18 to 24 nucleotides of a target gene and wherein the binding site sequence is located in an untranslated region of RNA encoded by the target gene.

34. (new) The nucleic acid of claim 32, wherein the nucleic acid is at least 15/25 complementary to a binding site sequence of 18 to 24 nucleotides of a target gene and wherein the binding site sequence is located in an untranslated region of RNA encoded by the target gene.

35. (new) A vector comprising an insert, wherein the insert consists of the nucleic acid of claim 21.

36. (new) A vector comprising an insert, wherein an insert consists of the nucleic acid of claim 25.

37. (new) A probe comprising insert, wherein an insert consists of the nucleic acid of claim 21.

38. (new) A probe comprising an insert, wherein an insert consists of the nucleic acid of claim 25.

39. (new) A gene expression inhibition system comprising the vector of claim 35 and a means for inserting said vector into a cell.

40. (new) A gene expression inhibition system comprising the vector of claim 36 and a means for inserting said vector into a cell.

APPENDIX B



UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,943	06/28/2003	Rebekah Brunswick	050992.0300.CPL0007	1942
37608 7088 11680006 ROSETTA-GENOMICS c/o PSWS 700 W. 47TH STREET SUITE 1000 KANSAS CITY, MO 64112			EXAMINER (RDK, DANA H)	
			ART UNIT 3659	PAPER NUMBER
DATE MAILED: 11/09/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10064 343		BERNARD, ITZHAK	
	Examiner		Art Unit	
	Date Sent		1995	

~ The MAILING DATE of this communication appears on the cover sheet with the correspondence address ~

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

Exemptions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after 306 (3) 306(a) from the mailing date of this communication.

If no period for reply is specified above, the maximum statutory period will apply and will expire 306 (3) 306(a) from the mailing date of this communication.

Failure to reply within the 101 or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 132). Any reply submitted by the Office later than three months after the mailing date of this communication, which if timely filed, may reduce any correct claim term adjustment. See 37 CFR 1.136(b).

Status

1) ☒ Responsive to communication(s) filed on 11 September 2005

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1958 O.G. 11, 493 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 11-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 11-12 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☒ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.89(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(a).

11) ☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-163.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some c) ☐ None of:

1 ☐ Certified copies of the priority documents have been received.

2 ☐ Certified copies of the priority documents have been received in Application No. _____.

3 ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(b)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachments

<p>13 <input type="checkbox"/> Notice of Preliminary Objection (PPO-001)</p> <p>14 <input type="checkbox"/> Notice of Opposition's Patent Drawing Review (PPO-040)</p> <p>15 <input type="checkbox"/> Information Disclosure Statement(s) (PTO/0200)</p> <p>16 <input type="checkbox"/> Patent Information Sheet (PIS-001)</p>	<p>47 <input type="checkbox"/> Interview Summary (PTO-412)</p> <p>48 <input type="checkbox"/> Patent Withdrawal Data</p> <p>49 <input type="checkbox"/> Notice of Informal Patent Application</p> <p>50 <input type="checkbox"/> Other _____</p>
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17 ☐ Other _____

PTOL 336 (Rev. 08-00) Office Action Summary Page of Paper No. 0001 Date 20060805

APPENDIX C

Application No.: 10/604,943

Docket No.: 050992.0300.07USCP

AMENDMENTS TO THE CLAIMS

1. - 20. (Canceled)

21. (Currently Amended) An isolated nucleic acid consisting of ~~48-49~~ 430 ~~X~~ nucleotides wherein the sequence of the nucleic acid comprises:

- (a) ~~at least 48 X~~ consecutive nucleotides of SEQ ID NOs: 476, 477, 480, 122, 131, or 133;
- (b) an RNA equivalent of (a);
- (c) a sequence at least ~~42/63~~ 42/75 identical to (a) or (b); or
- (d) the complement of any one of (a)-(c).

wherein

~~X=18 to 120.~~~~Y=18, and~~~~X≥Y.~~

22. (Canceled)

23. (Currently Amended) The nucleic acid of claim 21, wherein the ~~at least 48 X~~ nucleotides is ~~are~~ of a sequence selected selected from the group consisting of SEQ ID NOs: 477, 480, and 482.

24. (Currently Amended) The nucleic acid of claim 21, wherein the nucleic acid consists of ~~X=18 to 34 nucleotides.~~

25. (Currently Amended) The nucleic acid of claim 21, wherein ~~X=Y~~, the sequence of the nucleic acid consists of:

- (a) ~~SEQ ID NOs: 476~~;
- (b) an RNA equivalent of (a);
- (c) a sequence at least ~~42/63~~ nucleotides identical to (a) or (b); or
- (d) the complement of any one of (a)-(c).

26. (Canceled)

27. (Currently Amended) The nucleic acid of claim ~~25~~ 23, wherein ~~X<Y~~, the ~~at least 18~~ nucleotides is ~~of a sequence selected from the group consisting of~~ of a sequence selected from the group consisting of SEQ ID NOs: 477, 480, and 482.

28. (Currently Amended) The nucleic acid of claim 25, wherein the nucleic acid consists of ~~X=18 to 34 nucleotides.~~

29. - 34. (Canceled)

35. (Currently Amended) A vector comprising an insert, wherein the insert consists of the nucleic acid of claim 21.

36. (Currently Amended) A vector comprising an insert, wherein an insert consists of the nucleic acid of claim 25.

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Application No.: 10/604,943

Docket No.: 050992.0300.07USCP

37. - 40. (Canceled)

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-3-

-7-

APPENDIX D



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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 Alexandria, Virginia 22304-1400
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,943	06/28/2002	Robert R. Kowalski	050992.0300.CPLS07	1942
1788 7290 05/08/2001 ROSETTA-GENOMICS c/o PSWS 700 W. 47TH STREET SUITE 1000 KANSAS CITY, MO 64112			EXAMINER ZERN, DANA H	
			ART UNIT	PAPER NUMBER
			1812	
			MAIL DATE	DELIVERY MODE
			05/08/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	10/604,943		BENTWICH, ITZHAK	
	Examiner		Art Unit	
	Dana Shin		1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after 300 (3) MONTHS from the mailing date of this communication.

If no period for reply is specified above, the maximum statutory period will apply and will expire 300 (3) MONTHS from the mailing date of this communication.

Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any current patent term adjustment. See 37 CFR 1.704(g).

Status

1) ☒ Responsive to communication(s) filed on 09 May 2007.

2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 21, 23, 25, 27, 28, 35 and 36 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 21, 23, 25, 27, 28, 35 and 36 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(e).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-846)

3) ☒ Information Disclosure Statement(s) (PTO/SD/08)
Paper No(s)/Mail Date 3/2/07

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____

5) ☐ Notice of Informal Patent Application

6) ☐ Other _____

U.S. Patent and Trademark Office
PTOL-326 (Rev. 08-00)

Office Action Summary

Part of Paper No./Mail Date 20070517

APPENDIX E



UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,943	08/28/2003	Iszhak Benowitz	050692.0300.07USCP	1942
3788 7990 15/29/2007 ROSETTA-GENOMICS c/o PSWS 700 W. 47TH STREET SUITE 1000 KANSAS CITY, MO 64112			EXAMINER SMITH, DANA H	
			ART 1/2001	PAPER NUMBER
			1675	
			MAIL DATE	DELIVERY MODE
			11/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10604,943	BENTWICH, ITZHAK	
	Examiner	Art Unit	
	Dana Shin	1635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.126(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period to reply will, by itself, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may require a fee correction based on adjustment. See 37 CFR 1.754(b).

Status

1) ☒ Responsive to communication(s) filed on 01 October 2007.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1535 C.D. 11, 463 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 21, 23, 25, 27, 28, 35 and 36 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) 21, 22, 25, 27, 28, 35 and 36 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some * c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-848) 3) <input type="checkbox"/> Information Concerning Statement(s) (PTO-501/06) Paper No(s)/Mail Date: _____	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date: _____ 5) <input type="checkbox"/> Notice of Informal Patent Application 6) <input type="checkbox"/> Other: _____
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 PTOA-356 (Rev. 05-05) Office Action Summary Part of Paper No./Mail Date 20071022

APPENDIX F

Application No. 10/604,943

Docket No. 050992.0300.07USCP

AMENDMENTS TO THE CLAIMS

1. - 20. (Canceled)
21. (Currently Amended) An isolated nucleic acid ~~consisting of X nucleotides~~ wherein the sequence of the nucleic acid ~~comprises~~ is selected from the group consisting of:
- (a) ~~X consecutive nucleotides of SEQ ID NOS: 128, 131, or 133;~~
 - (b) ~~an RNA equivalent encoded by the nucleic acid of (a); and~~
 - (c) ~~a sequence at least 83.3% identical to (a) or (b); or~~
 - (d)(c) ~~the complement of any one of (a)-(c) (a) or (b), wherein the complement is identical in length to (a) or (b).~~
- ~~X = 20 to 120;~~
~~X ≥ 20 to 120;~~
~~X ≥ X.~~
22. (Canceled)
23. (Currently Amended) ~~The An isolated nucleic acid of claim 21, wherein the X nucleotides are of a sequence of the nucleic acid is~~ selected from the group consisting of: SEQ ID NOS: 477, 480, and 482
- (a) SEQ ID NO: 477, SEQ ID NO: 480, or SEQ ID NO: 482;
 - (b) an RNA encoded by the nucleic acid of (a); and
 - (c) the complement of (a) or (b), wherein the complement is identical in length to (a) or (b).
24. - 34. (Canceled)
35. (Previously presented) A vector comprising the nucleic acid of claim 21.
36. (Currently Amended) A vector comprising the nucleic acid of claim 26 23.
37. (Canceled)
38. (New) A probe comprising the nucleic acid of claim 21.
39. (New) A probe comprising the nucleic acid of claim 23.